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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,868

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Arieh Jehuda Polak

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SUITE 115

MIAMI, FL 33180

EXAMINER

CHAUDHRY, SAEED T

ART UNIT

PAPER NUMBER

1746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/803,868

Applicant(s)

POLAK, ARIEH JEHUDA

Examiner

Saeed T. Chaudhry

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1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-96 is/are pending in the application.
- 4a) Of the above claim(s) 54-96 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/29/04</u> <u>9/22/04</u> <u>3/6/06</u> | 6) <input type="checkbox"/> Other: ____ |

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I: Claims 1-53, drawn to method and device having an air stream means and nozzle unit for discharge of liquid, classified in Class 239, subclass 289.

Group II: Claims 54-71, drawn to method of washing a body, classified in Class 134, subclass 34.

Group III: Claims 72-96, drawn to method and device for cooling cattle having a plurality of nozzles; an actuating means; wind sensor means; kinematic means and means for actuating said kinematic means, classified in Class 261, subclass 30.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different design and mode of operation and effect.

Group I, claims 1-53 have air steam generating means and nozzle unit, wherein group II, claims 54-71 requires nozzle unit with first inlet and second inlet which is not required in the group I and III. Further, group II claims a method of washing body and group III claims method of cooling cattle, which have different mode of operation and effects. Furthermore, group III requires actuating means; wind sensor means ; kinematic means and means for actuating said kinematic means, which are not required by groups I and II.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, have acquired a separate status in the art because of their recognized divergent subject matter, the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Seth Blum on December 21, 2006 a provisional election was made without traverse to prosecute the invention of group I, claim 1-53. Affirmation

of this election must be made by applicant in replying to this Office action. Claims 54-96 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The Specification

The disclosure is objected to because of the following informalities:

On page 2, line 22, wrong patent number is written.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claim 22-25 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "the control valve" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the control valve" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recites the limitation "the sensor" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 recites the limitation "the controller" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 53 is indefinite and incomplete because it is not understood what is being claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (c) he has abandoned the invention.
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- (f) he did not himself invent the subject matter sought to be patented.
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claims 1-7, 9, 11-21, 26-32, 36-37, 39-41 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Roach et al.

Roach et al (6,257,501) disclose a method and apparatus for generating mist stream capable of being propelled to a predetermined location and have a measurable and controllable dimension, wherein A mister and an electric fan combination is mounted upon a vertical stand. The mister has a housing arranged to define a curvature that is concentric with a rotational center of rotary fan blades and with the central back of the fan. The housing is attached to the fan guard grill. The mister has a flexible hose extending from a junction with the housing to a location distal from the housing to convey pressurized fluid from a source. The electric fan is pivotally connected on diametrically opposite sides to a connection structure, which is raised by a pole from a base structure (see abstract).

The electric fan body 10 encloses a set of fan blades 30 within fan guard grills 20. The fan blades 30 may be capable of rotating about an axis perpendicular to the blades in either a

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clockwise or counter-clockwise direction, thereby generating air currents. Although three fan blades are shown, more or less fan blades may be used. The direction of rotation may be manually selected by the user. The speed of the fan blade rotation may also be manually selected by the user. Different speed options may be provided.

The electric fan body 10 may be free standing, or it may be contained within a stand 40. It may be attached to a stand 40 at a hinge 50 which allows the electric fan body 10 to swing forward or backward about an axis parallel to the floor. The stand 40 may be connected to a base 60 so that the structure in its entirety may be securely placed on a floor. The stand 40 includes a connection structure that has two curved arms that are pivotally connected at diametrically opposite locations on the circumferential edge of the electric fan as shown in FIG. 1. A pole raises the arms to an elevation higher than that of the base 60 (see col. 2, lines 17-53).

The electric fan body 10 may also have a concentric mister manifold 70 affixed to the fan guard grill 20 on the front side of the electric fan body 10. The mister manifold 70 may be affixed to the fan guard grill 20 at points equidistantly spaced away from the center hub of the fan. The mister manifold 70 may be affixed to the fan guard grill 20 through the use of conventional bolts or screws, or it may be affixed to the fan guard grill 20 by clips which can clasp the mister manifold 70 to the fan guard grill 20. The mister manifold 70 may also be attached by mounting clasps 200, illustrated in FIG. 4 (see col. 2, line 53 through col. 3, line 6).

The mister manifold 70 may be a hollow body so that fluid may travel inside the mister manifold 70 freely, as it would in a fluid channel. The concentric mister manifold 70 may have a nozzle (not shown) in communication with the hollow fluid channel. Fluid, such as water, may travel through the hollow body of the mister manifold 70 and be projected out a nozzle.

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Once projected in front of the electric fan body 10, the fluid would be propelled forward by the air currents produced by the rotating fan blades 30, thereby creating a fluid mist cloud. The mister manifold 70 may contain many nozzles. Since the density of the mist cloud is dependent on the amount of fluid projected by the mister manifold, it would be beneficial if a user could regulate the amount of water flowing through the flexible hose 80 into the mister manifold 70. Therefore, the flexible hose 80 may have a valve so that a user may manually control the amount of fluid flowing into the mister manifold 70 at any time. In the alternative, the flexible hose 80 may be connected to an already existing valve, such as a pressurized water valve usually located in gardens (see col. 3, lines 22-53).

The flexible hose 80 may be attached to a single point on the mister manifold 70, or it may be attached to multiple points on the mister manifold 70. For example, it may be attached at each nozzle on the mister manifold 70 (see col. 4, lines 1-4). It will be noted by those skilled in the art that the propagation area of the mist cloud can be decreased or increased by decreasing or increasing the diameter of the concentric mister manifold 70 (see col. 4, lines 16-19).

Roach et al apparatus is capable of pressure the liquid into the nozzle in the arrange of 3 to 6 atmospheres. The spray angle can be changed substantially 45 degrees by the shaft 50 with respect to the stand of the fan as claimed in claim 16. Roach et al disclose the garden hose is connected to the fan having a valve. Therefore, spray fan is capable of regulate the liquid flow by a control valve. Since the fan is swingable on the shaft 50. Therefore fan is capable of performing the steps as claimed in claims 26-32. Roach et al discloses all the steps and elements as claimed herein. Therefore, Roach et al anticipate the claimed apparatus and process.

Claims 1-5, 7, 9, 11-21, 32-34, 36-37 and 39-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Natschke et al.

Natschke et al (6,086,053) disclose method and apparatus for producing mist in an air stream. A mister for use with fans having blades protected by a guard wherein the mister is mounted on the guard and through a plurality of water atomizing nozzles projects a mist into the fan airflow to produce a cooling effect by the evaporation of the moist air.

In the drawings, the mister is illustrated at 28 and includes a body 30 which may be formed of metal, or could be molded of a synthetic plastic material. The body 30 includes a rear support surface 32 and a front surface 34 which, as will be apparent in FIG. 4, consists of a conical segment. The outermost portion of the body is defined by the front end surface 36 which is parallel to the rear support surface 32.

Interiorly, a plurality of passages, six in the enclosed embodiment, are indicated at 38. Each passage 38 includes an inner end 40 wherein all of the inner ends of the passages 38 converge and communicate with each other as appreciated in FIGS. 3 and 4. The passage outer ends 42 each perpendicularly intersect the front surface 34, FIG. 4, and the passage outer ends 42 are each threaded at 44.

A water supply passage 46, FIG. 4, is defined within the body 30 and communicates with all of the passages 38 wherein the passages 38 and the passage 46 constitute a manifold. The outer end of the passage 46 is threaded at 48 for receiving the hose fitting 50. A water atomizing nozzle 52 having threads 54 formed thereon is received within the passage threads 44, FIG. 4, wherein the nozzles 52 each communicate with a passage 38 and are located adjacent the front surface 34 perpendicularly extending therefrom and equally spaced, circumferentially, about the

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front surface 34 as will appreciated in FIG. 3. Each of the nozzles 52 includes a filter screen 56 located within the associated passage 34 to screen out foreign matter.

The mister 28 is mounted upon the blade protective grill 20, the front grill 22 specifically, and such mounting includes two threaded fastener receiving bores 58, FIG. 4, which receive bolts or screws 60, FIG. 2, extending through holes defined upon a mounting plate, or washers, located upon the inside of the front grill 22, FIG. 2. Preferably, the axis of the mister body 30 is coincident with the axis of rotation of the fan shaft 16.

A flexible hose 62 is affixed to the fitting 50 and receives water from the valve 64, FIG. 2, attached to the pedestal 14. The valve 64 includes a control handle 66 whereby the amount of water flowing through the valve 64 can be closely regulated. The valve 64 receives water from a hose 68, such as a garden hose or the like, attached to a pressurized water source.

In operation, the mister body 30 is mounted coaxially upon the guard grill 20 as illustrated in FIGS. 1 and 2, and the motor 12 is energized to cause air to flow through the guard grill 20 from the right to the left, FIG. 2, as produced by the rotation of the blades 18. The operator then adjusts the valve handle 66 to regulate the amount of water flowing into the mister body 30 through the water supply passage 46. As the passages 38 are thereby filled with water and the water forced through the nozzles 52, the spray pattern produced by the nozzles 52 is evenly projected throughout the airflow through the guard grill 20 wherein the entire airflow through the grill 20 will be receiving water particles which will travel with the air movement to provide the desired evaporative cooling (see col. 3, line 1 through col. 4, line 15).

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Natschke et al apparatus is capable of pressure the liquid into the nozzle in the arrange of 3 to 6 atmospheres. Natschke et al discloses all the steps and elements as claimed herein.

Therefore, Roach et al anticipate the claimed apparatus and process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8, 10, 22-25, 35, 38 and 46-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roach et al or Natschke et al in view of Holster et al and Terrell et al.

Roach et al and Natschke et al were discussed supra. However, the reference fails to disclose check valve, timer, a controller, a sensor and cooling animals.

Hostler et al (4,566,890) disclose a timer for controlling fluid flow by actuating a valve (see col. 6, lines 49-65).

Terrell et al (6,578,828) disclose a method and apparatus for cooling live stock. One or more cooling fans are connected to programmable oscillation means, enabling the herds man to

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program fan oscillation according to the location of the livestock. Water is injected under high pressure into the air stream of the fans to create a fog. The system is also programmable according to various environmental conditions, including temperature, humidity, and wind velocity. The pressure and volume of the injected water are programmable and may be adjusted by the controller according to the observed environmental conditions. The livestock cooling system may further comprise controller means for controlling the oscillation means and the means for injecting water droplets into the air stream. The controller means comprise, in part, a plurality of sensing devices positioned to sense environmental conditions and adapted to produce a signal in response to those conditions, a position indication device to determine the rotational position of the fan, where the position indication device is adapted to produce a signal in response to the rotational position.

A variety of different environmental conditions may be sensed by the sensing devices and inputted to the controller means, including temperature, humidity, wind velocity, intensity of sunlight, and the position of the sun with respect to the structure. FIGS. 1 and 2 show the major components of a typical fan 20 used in the disclosed system. Depending upon the particular application, a plurality of similar fans 20 may be used in the system. Each fan comprises a blade, not shown, enclosed within housing 22, a motor 24 attached to the housing 22 for rotating the blade, a grill 26 attached to the front of the housing 22, a mist ring 28 attached to the grill 26, nozzles 30 connected to the mist ring 28, a water supply line 32 for providing high pressure water to the nozzles 30, power cable 34 for providing electrical power to the motor 24, motor starter 36 for starting motor 24, and mounting bracket 38, which supports the weight of fan 20.

Water droplets are injected into the air stream 44 created by each fan 20. Water is delivered to the mist ring 28 of each fan 20 through a high pressure water line 32. Stainless steel or other corrosion resistant materials with acceptable pressures ratings are acceptable materials for construction of the mist ring 28. A plurality of nozzles 30 are attached to the mist ring 28. Nozzles 30 may be screwed into female connections welded to mist ring 28, or otherwise attached (see abstract and claims).

It would have been obvious at the time applicant invented the claimed device and process to incorporate the cited elements of controller, sensor, and timer as disclosed by Hostler et al and Terrell et al into the devices and processes of Roach et al and Natschke et al for the purpose of automatically perform the manual process. It has been held obvious for mechanical or automatic means to replace manual activity (see In re Venner et al. 120 USPQ 192 (CCPA 1958)). Therefore, one of ordinary skill in the art would include these components which are known. Further, check valve are well known in the art. Therefore, one of ordinary skill in the art would include a check valve for manipulating the liquid in one direction. Further, introducing different fluids in the nozzle from different reservoirs are well known. Therefore, one of ordinary skill in the art would utilize different fluids to spray from the different or same nozzles, since it is held obvious to duplicate the parts for multiple effect (see St. Regis Paper Co. v. Bemis Co. Inc. 193 USPQ 8, 11 (7th Cir. 1977)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.


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When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Saeed T. Chaudhry
Patent Examiner



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